STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2498.4—1993
Methods of testing rigid cellular plastics
Method 4: Determination of cross-breaking strength

RECONFIRMATION NOTICE

Major stakeholders of this publication have reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 03 August 2020.

NOTES

AS 2498.4—1993
Reconfirmed 2020

Australian Standard®

Methods of testing rigid cellular plastics

Method 4: Determination of cross-breaking strength

METHOD

1 SCOPE This Standard sets out a method for determining the cross-breaking strength of a rigid cellular plastics material.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
2193 Methods for calibrating and grading of force-measuring systems of testing machines
2498 Methods of testing rigid cellular plastics
2498.1 Method 1: Sampling and conditioning

3 PRINCIPLE The test specimen is subjected to bending. The cross-breaking strength is the maximum stress at fracture as determined by bending theory.

4 APPARATUS

4.1 Suitable testing machine—capable of applying a force at a constant rate of motion, complying with the requirements for Grade B machines of AS 2193.

4.2 Two supporting bars—placed 150 ±2.5 mm apart mounted on a suitable fixed base, and a loading bar which may be attached to the moving head of the testing machine. The surface of each bar bearing on the test specimen shall have a radius of 6 mm. The length of the bar shall not be less than the width of the test specimen. The bars shall be arranged so that they are parallel to each other and apply a uniform force on the test specimen. The loading bar shall apply the force mid-way between the two supporting bars (see Figure 1).

4.3 Callipers and rules—capable of measuring to an accuracy of ±1 mm.

5 TEST SPECIMENS Three rectangular test specimens of lengths 200 +5 –0 mm and width and thickness 50 ±1 mm shall be cut from the sample without deformation of the original cell structure.

NOTE: Where samples of less than 50 mm thickness are supplied for test, reference should be made to the relevant specification to establish the provisions for preparation of suitable test specimens.

6 CONDITIONING Test specimens shall be conditioned in accordance with AS 2498.1.